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Dennis D. Bicker

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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT

PAPER NUMBER

2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,132	<b>Applicant(s)</b> BICKER ET AL.	
	<b>Examiner</b> PIERRE-LOUIS DESIR	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,14,15,19 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,14,15,19 and 22-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 14, and 24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8, 12-13 of U.S. Patent No. 7376112. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 1 of the present application discloses:

A method of forwarding a call from a mobile phone, the method comprising: determining that the mobile phone is within range of a wireless local area network base station with voice over internet protocol capability, the mobile phone including a wireless local area network (WLAN) module and a wireless wide area network (WWAN) module; receiving an internet protocol address associated with the wireless local area network base station via the WLAN module; sending a call forwarding message including the Internet Protocol (IP) address from the mobile phone to a remote cellular network element of a wide area cellular network via the WWAN module, the call forwarding message to redirect a call destined for the mobile phone to the wireless local area network base station for transmission to the mobile phone; determining that the mobile phone has moved out of range of the wireless local area network base station and while the mobile phone is out of range of the wireless local area network base station, sending a

message to the cellular network element to cancel call forwarding to the wireless local area network base station.

Claim 8 of U.S. Patent No. 7376112 discloses:

A method of providing seamless access to a multi-mode communication terminal across a plurality of communication networks, the method comprising: providing the multi-mode communication terminal access to a first communication network via a first directory number; detecting availability to the multi-mode communication terminal of a second communication network via a second directory number; automatically enabling call forwarding of calls directed to the first directory number of the first communication network to the second directory number of the second communication network before a change of access from the first communication network to the second communication network; changing access of the multi-mode communication terminal from the first communication network to the second communication network; and automatically disabling call forwarding of calls directed to the second directory number of the second communication network conflicting with the enabled call forwarding of calls directed to the first directory number of the first communication network after the change of access from the first communication network to the second communication network.

Comparing to U.S. Patent No. 7376112, claim 1 of the present application discloses a multimode communications terminal (i.e., a mobile phone having WLAN module and WWAN module) wherein a first wireless network is associated with a first IP address (i.e., directory number), comprising sending a call forwarding message including the IP address from the mobile phone to a remote cellular network element of a wide area cellular network via the

WWAN module, the call forwarding message to redirect a call destined for the mobile phone to the wireless local area network base station for transmission to the mobile phone (i.e., enabling call forwarding of calls directed to the first directory number of the first communication network to the second directory number of the second communication network); and sending a message to the cellular network element to cancel call forwarding to the wireless local area network base station (i.e., disabling call forwarding of calls directed to the second directory number of the second communication network conflicting with the enabled call forwarding of calls directed to the first directory number of the first communication network).

However, Claim 1 of the present invention does not disclose that the sending and canceling of the call forwarding function is done automatically, nor does it disclose a second directory number associated with the second communication network. Also, claim 1 of the present invention does not disclose that the sending of call forwarding is accomplished before a change of access network and the canceling of call forwarding is accomplished after the change of access from the first communication network to the second communication network.

However, Claim 1 of the present invention does disclose that first a call forwarding message including the IP address is sent to a remote cellular network element of a wide area cellular network to redirect a call destined for the mobile phone to the WLAN network base station. And, after determining that the mobile phone has moved out of range of the wireless local area network base station (i.e., after a change of access from the first communication network to the second communication network), sending a message to cancel call forwarding to the WLAN network base station.

It would have been obvious to one skilled in the art to immediately envision that the WWAN network is associated with an IP address since there is communication between the WWAN module and the wide area cellular network, and that the omission of automatically in sending and canceling of the call forwarding message made claim 1 of the present invention a broader version of claim 8 of U.S. Patent No. 7376112. Therefore, since omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before. In re KARLSON (CCPA) 136 USPQ 184 (1963), claim 1 is not patentably distinct from claim 1 of U.S. Patent No. 7376112.

Also, claim 8 of U.S. Patent No. 7376112 does not specifically disclose that the multimode communications terminal comprising a WLAN module and WWAN module as specified in claim 1 of the present invention. However, claims 12 and 13 of U.S. Patent No. 7376112 described that the first communication network comprises a wireless wide area network and the second communication comprises wireless local area network. Therefore, with the disclosure of claim 8 U.S. Patent No. 7376112 that the mobile phone is a multimode terminal, one skilled in the art would unhesitatingly conceptualize that the mobile terminal communicates with the first communication network (i.e., a WLAN or WWAN network) with a first module (i.e., WLAN or WWAN module) and communicates with the second communication network (i.e., a WWAN or WLAN network) with a second module (i.e., WWAN or WLAN module) in order to increase the efficiency of the mobile terminal by providing it with capability to seamlessly switch between WLAN and WWAN networks.

Claim 24 of the present invention discloses a method of forwarding a call from a mobile communication device, the method comprising: receiving an internet Protocol (IP) address at a wireless communication device from a dynamic host configuration protocol (DHCP) module of a wireless local area network device via a short range wireless network, the wireless communication device including a wide area network communications module to communicate with a wide area wireless network and a local area network communications module to communicate with the wireless local area network device; establishing a connection to a Voice over Internet Protocol (VoIP) provider via the wireless local area network using the IP address; after the mobile communication device is registered with the VoIP provider, sending a call forwarding message from the mobile communication device to a cellular network element of the wide area wireless network via the wide area network communications module, the call forwarding message including data related to the VoIP provider to forward calls intended for the mobile communications device to the VoIP provider for routing to the mobile communication device via the wireless local area network; and determining that the mobile phone has moved out of range of the wireless local area network base station and while the mobile phone is out of range of the wireless local area network base station, sending a message to the cellular network element to cancel call forwarding to the wireless local area network base station.

Claim 8 of U.S. Patent No. 7376112 discloses:

A method of providing seamless access to a multi-mode communication terminal across a plurality of communication networks, the method comprising: providing the multi-mode communication terminal access to a first communication network via a first directory number;



detecting availability to the multi-mode communication terminal of a second communication network via a second directory number; automatically enabling call forwarding of calls directed to the first directory number of the first communication network to the second directory number of the second communication network before a change of access from the first communication network to the second communication network; changing access of the multi-mode communication terminal from the first communication network to the second communication network; and automatically disabling call forwarding of calls directed to the second directory number of the second communication network conflicting with the enabled call forwarding of calls directed to the first directory number of the first communication network after the change of access from the first communication network to the second communication network.

Comparing to U.S. Patent No. 7376112, claim 24 of the present application discloses a multimode communications terminal (i.e., a mobile phone having WLAN module and WWAN module) wherein a first wireless network is associated with a first IP address (i.e., directory number), comprising sending a call forwarding message including the IP address from the mobile phone to a remote cellular network element of a wide area cellular network via the WWAN module, the call forwarding message to redirect a call destined for the mobile phone to the wireless local area network base station for transmission to the mobile phone (i.e., enabling call forwarding of calls directed to the first directory number of the first communication network to the second directory number of the second communication network); and sending a message to the cellular network element to cancel call forwarding to the wireless local area network base station (i.e., disabling call forwarding of calls directed to the second directory

number of the second communication network conflicting with the enabled call forwarding of calls directed to the first directory number of the first communication network).

However, Claim 24 of the present invention does not disclose that the sending and canceling of the call forwarding function is done automatically, nor does it disclose a second directory number associated with the second communication network. Also, claim 24 of the present invention does not disclose that the sending of call forwarding is accomplished before a change of access network and the canceling of call forwarding is accomplished after the change of access from the first communication network to the second communication network.

However, Claim 24 of the present invention does disclose that first a call forwarding message including the IP address is sent to a remote cellular network element of a wide area cellular network to redirect a call destined for the mobile phone to the WLAN network base station. And, after determining that the mobile phone has moved out of range of the wireless local area network base station (i.e., after a change of access from the first communication network to the second communication network), sending a message to cancel call forwarding to the WLAN network base station.

It would have been obvious to one skilled in the art to immediately envision that the WWAN network is associated with an IP address since there is communication between the WWAN module and the wide area cellular network, and that the omission of automatically in sending and canceling of the call forwarding message made claim 24 of the present invention a broader version of claim 8 of U.S. Patent No. 7376112.

Also, claim 8 of U.S. Patent No. 7376112 does not specifically disclose that the multimode communications terminal comprising a WLAN module and WWAN module as

specified in claim 24 of the present invention. However, claims 12 and 13 of U.S. Patent No. 7376112 described that the first communication network comprises a wireless wide area network and the second communication comprises wireless local area network. Therefore, with the disclosure of claim 8 U.S. Patent No. 7376112 that the mobile phone is a multimode terminal, one skilled in the art would unhesitatingly conceptualize that the mobile terminal communicates with the first communication network (i.e., a WLAN or WWAN network) with a first module (i.e., WLAN or WWAN module) and communicates with the second communication network (i.e., a WWAN or WLAN network) with a second module (i.e., WWAN or WLAN module) in order to increase the efficiency of the mobile terminal by providing it with capability to seamlessly switch between WLAN and WWAN networks.

3. Claim 14 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over 8, 12-13 of U.S. Patent No. 7376112, in view of Fors et al. (Fors), Patent No. 6931249.

Claim 14 of the present invention (Currently Amended) A mobile phone device comprising: a housing; an antenna attached to the housing; a wide area cellular communications module disposed within the housing, the wide area cellular communications module having a cellular interface to communicate with a remote wide area cellular network; and a short-range wireless local area network module disposed within the housing, the short-range wireless local area network module including a wireless interface to communicate with the wireless local area network having voice over internet protocol communications capability, the short-range

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wireless local area network module adapted to receive an Internet Protocol (IP) address from the wireless local area network; wherein the wide area cellular communication module formulates a call forwarding message that includes the IP address; and wherein the wide area cellular communication module communicates the call forwarding message to the remote wide area cellular network via the cellular interface; and wherein the wide area cellular communication module is adapted to formulate a cancel message to cancel the previously communicated call forwarding message, the cancel message for transmission to the remote wide area cellular network.

Claim 1 of U.S. Patent No. 7376112 a multi-mode communications terminal having access to a first communication network via a first directory number and configured to gain seamless access to a second communication network via a second directory number, the multi-mode communications terminal comprising: an intelligent call forwarding module to: automatically enable call forwarding of calls directed to the first directory number of the first communication network to the second directory number of the second communication network before a change of access from the first communication network to the second communication network; and automatically disable call forwarding of calls directed to the second directory number of the second communication network conflicting with the enabled call forwarding of calls directed to the first directory number of the first communication network after the change of access from the first communication network to the second communication network.

Comparing to U.S. Patent No. 7376112, claim 14 of the present application discloses a multimode communications terminal (i.e., a mobile phone having WLAN module and WWAN module) wherein a first wireless network is associated with a first IP address (i.e., directory number), comprising sending a call forwarding message including the IP address from the mobile phone to a remote cellular network element of a wide area cellular network via the WWAN module, the call forwarding message to redirect a call destined for the mobile phone to the wireless local area network base station for transmission to the mobile phone (i.e., enabling call forwarding of calls directed to the first directory number of the first communication network to the second directory number of the second communication network); and sending a message to the cellular network element to cancel call forwarding to the wireless local area network base station (i.e., disabling call forwarding of calls directed to the second directory number of the second communication network conflicting with the enabled call forwarding of calls directed to the first directory number of the first communication network).

However, Claim 14 of the present invention does not disclose that the sending and canceling of the call forwarding function is done automatically, nor does it disclose a second directory number associated with the second communication network. Also, claim 14 of the present invention does not disclose that the sending of call forwarding is accomplished before a change of access network and the canceling of call forwarding is accomplished after the change of access from the first communication network to the second communication network.

However, Claim 14 of the present invention does disclose that first a call forwarding message including the IP address is sent to a remote cellular network element of a wide area cellular network to redirect a call destined for the mobile phone to the WLAN network base

station. And, after determining that the mobile phone has moved out of range of the wireless local area network base station (i.e., after a change of access from the first communication network to the second communication network), sending a message to cancel call forwarding to the WLAN network base station.

It would have been obvious to one skilled in the art to immediately envision that the WWAN network is associated with an IP address since there is communication between the WWAN module and the wide area cellular network, and that the omission of automatically in sending and canceling of the call forwarding message made claim 1 of the present invention a broader version of claim 1 of U.S. Patent No. 7376112.

Also, claim 1 of U.S. Patent No. 7376112 does not specifically disclose that the multimode communications terminal comprising a WLAN module and WWAN module as specified in claim 1 of the present invention. However, claims 12 and 13 of U.S. Patent No. 7376112 described that the first communication network comprises a wireless wide area network and the second communication comprises wireless local area network. Therefore, with the disclosure of claim 8 U.S. Patent No. 7376112 that the mobile phone is a multimode terminal, one skilled in the art would unhesitatingly conceptualize that the mobile terminal communicates with the first communication network (i.e., a WLAN or WWAN network) with a first module (i.e., WLAN or WWAN module) and communicates with the second communication network (i.e., a WWAN or WLAN network) with a second module (i.e., WWAN or WLAN module) in order to increase the efficiency of the mobile terminal by providing it with capability to seamlessly switch between WLAN and WWAN networks.

Claim 1 of U.S. Patent No. 7376112 does not specifically disclose that the multimode communications terminal comprises of a housing; an antenna attached to the housing; a wide area cellular communications module disposed within the housing, the wide area cellular communications module having a cellular interface to communicate with a remote wide area cellular network; and a short-range wireless local area network module disposed within the housing, the short-range wireless local area network module including a wireless interface to communicate with the wireless local area network having voice over internet protocol communications capability, the short-range wireless local area network module adapted to receive an Internet Protocol (IP) address from the wireless local area network.

However, a mobile phone (see abstract) device comprising: a housing (see fig. 2b); an antenna attached to the housing (see fig. 2b); a memory disposed within the housing adapted to store the IP address that uniquely identify a communication path between the mobile phone and the wireless local area network (see fig. 2b, col. 4, line 8), received by the mobile phone from a wireless local area network (the MS obtains an IP address) (see col. 5, lines 64-65); a wide area cellular communications module disposed within the housing (i.e., dual mode mobile station: a WWAN mode and a WLAN mode) (see abstract, and col. 3, lines 18-20), the wide area cellular having a cellular interface to communicate with a remote wide area cellular network (i.e., the dual mode is served by a cellular base station) (see col. 3, lines 18-20); and a short-range wireless local area network module disposed within the housing (i.e., dual mode mobile station: a WWAN mode and a WLAN mode) (see abstract, and col. 3, lines 18-20), the short-range wireless local area network module having a wireless interface to communicate with a wireless local area network having voice over internet protocol communications capability (i.e., the dual

mode mobile station monitors WLAN availability). Fors also discloses a system wherein the mobile phone determines that it is in range of the wireless local area network by receiving a message in accordance with an IEEE 802.11 communication protocol (i.e., the mobile station monitors for WLAN (WLAN is a known wireless infrastructure such as that conforming to the IEEE 802.11 standard) (col. 3, lines 11-21, and 37-39, and col. 5, lines 62-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Fors with the teachings described by U.S. Patent No. 7376112 to arrive at the claimed invention. A combination for doing so would have been to ensure that data is routed to the proper network as related to the network that has been determined to provide cheaper service (see col. 5, line 62 through col. 6, line 7).

***Allowable Subject Matter***

4. Note: Upon receipt of a terminal disclaimer, claims 1-4, 6-7, 14-15, 19, 22-28 would be allowed over the prior arts.

Fors discloses a mobile station that is a dual-mode mobile phone capable of communicating with both the cellular network and the WLAN network. And, the dual-mode mobile station includes a processor, a dual-mode transmitter and a dual-mode receiver, wherein the MS provides information to the access gateway so that it can initiate a handoff with the serving cellular MSC. By triggering handoffs in this manner, cellular networks need not have special information about non-cellular networks to support handoffs. Instead, dual mode mobile stations can determine when a handoff to a non-cellular network is preferred and request a handing from the non-cellular network.



Ibe discloses a method wherein when a mobile node connects to a foreign network, which is any network that is not its home network, it registers its care-of-address (COA) with the home agent, which is a router that serves the mobile nodes in a given network. The home agent uses the COA to forward packets arriving at the home network and destined for the mobile node. The tunnel from the home agent terminates at the foreign agent (a router in the visited (foreign or roaming) network whose IP address the mobile uses as its COA), and it is the responsibility of the foreign agent to forward packets arriving via the tunnel to the mobile node.

Chandra discloses in paragraphs 39-40 mobile node which roams back to the home network. The mobile node sends a deregistration request to the home agent, requesting the home agent delete its bindings. The mobile node can delete the bindings to the mobile node. If a tunnel were created, it would also be deleted.

However, none of the cited references, including Fors, Ibe, Chandra, disclose or suggest all of the elements of Independent claims 1, 14 and 24. For example, Fors does not disclose or suggest “wherein the wide area cellular communication module communicates the call forwarding message to the remote wide area cellular network via the cellular interface.” Instead, Fors discloses that a mobile device sends a handin request (302) to a cellular access gateway via the wireless local area network access point and the IP network. Thus, Fors transmits the call forwarding request via the local area network access point and an IP network, and not via the cellular interface.

Also, none of the cited references disclose sending a message to the cellular network element to cancel call forwarding to the wireless local area network base station after

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determining that the mobile phone has moved out of range of the wireless local area network base station.

Also, during a search additional prior arts were discovered.

However, the closest prior arts, Jones et al. Publication Number 2004/0219948, Byrne (EP 0700227), and Krishan (US 6381453), either alone or in combination fail to anticipate or render obvious the subject matter disclosed in the independent claims.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PIERRE-LOUIS DESIR whose telephone number is (571)272-7799. The examiner can normally be reached on Monday-Friday 9:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pierre-Louis Desir/  
Examiner, Art Unit 2617

/DWAYNE D. BOST/  
Supervisory Patent Examiner,  
Art Unit 2617